ASL

Australian Society for Limnology Inc.

NEWSLETTER

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AUSTRALIAN SOCIETY FOR LIMNOLOGY INC.

The Australian Society for Limnology Inc. (ASL) is an Australian-based scientific society whose focus is the study and management of inland waters. The ASL was established in 1961, and has a current membership of over 650 researchers, managers, engineers, teachers and tertiary level students from all states and territories. Members have a strong professional interest in inland aquatic issues, including the maintenance of biodiversity, the maintenance and/or restoration of water quality, and the wise use of aquatic resources. The Society also has a strong interest in fostering the scientific and intellectual development of tertiary students.

The Society includes members working in government agencies, tertiary institutions and many industries related to aquatic resources. Through their daily activities, members have contact with local communities and are in a sound position to interpret and advise on inland water issues. The Society has a substantial knowledge base, and has assumed a responsibility to ensure that this is available to those who manage inland waters.

Accordingly, the charter of the ASL is to further our understanding of Australia's inland waters and to promote their wise use and sustainable management. In this manner we will contribute to the continued existence of this valued resource and the maintenance and enhancement of the quality of life for all Australians. The ASL regularly produces a newsletter with notes on limnological activities, articles of interest, book reviews and announcements of upcoming events likely to be of interest to Members.

ASL Home Page - http://www.asl.org.au/

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PRESIDENT'S REPORT

It was great to see so many old faces (and quite a number of newer ones) at the Annual Conference in Albury. I thought that the quality of the presentations was excellent - this and the broad range of topics discussed is clear evidence of a healthy, vibrant Society. Thanks to Ben Gawne, Rhonda Sinclair and others from the Organising Committee from the MDFRC, Charles Sturt University and LaTrobe for stepping up to the plate at such short notice and running such a successful event.

Next year's meeting will of course be held in association with the New Zealand Freshwater Sciences Society in Queenstown (South Island) (details are on the ASL website). I encourage all members to mark these dates in your calendars now to ensure that we have a good turnout (and keep our kiwi colleagues under control).

I am very pleased to have the opportunity to serve as President of ASL again. There has never been a more exciting and important time to be a researcher or manager with interests in inland and coastal waters. We face a great challenge in meeting growing demands for water, in the face of an increasing population and a changing climate, without degrading our significant river and wetland assets. As a professional Society, there is much we can do - especially in supporting and mentoring students to build future capacity to tackle these issues. I will be seeking input and advice as to how we can further promote the Society, grow our membership and continue to support our early career scientists.

I would like to take this opportunity to thank Sabine Schreiber for her considerable efforts as President over the past two years. I also thank the departing regional members of the Executive for their contributions: Naomi Rae, Suzi Wild, Darren Ryder and Angus McGregor - and welcome the following new members to the Executive: Darren Baldwin (Vice President), Michael Douglas (NT), Lien Sim (WA), Andrew Brooks (NSW) and Rebecca McIntyre (student rep). I look forward to working with you over the next two years.

Stuart Bunn **13 October 2006**

ASL EXECUTIVE

ASL would like to thank the following outgoing members of the executive for their stellar service:

Naomi Rea (NT)
Suzi Wild (WA)
Darren Ryder (NSW)
Angus McGregor (student rep)

NEW EXECUTIVE MEMBERS:

Northern Territories
Dr Michael Douglas
Senior Lecturer, School for Environmental Research, Charles Darwin University
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Michael's research focuses on understanding how catchment management practices, such as fire, weed and grazing management affect the ecology of freshwater ecosystems including tropical rivers, streams, wetlands and riparian zones. Most of his research is focused on aquatic animal (invertebrate and fish) and plant communities and aquatic ecosystem processes. He also has a strong interest in weed management in tropical savannas, particularly in understanding the ecological consequences of exotic grass invasion.

Western Australia
Dr. Lien Sim
Woodvale Research,
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Lien is a Research Scientist in Science Applications within the Science Division, and coordinate the wetland component of the Avon Natural Diversity Alliance project ND001: 'Baselining' the natural diversity of the Avon Catchment. He is involved in the collation of existing data and knowledge on wetlands within the Avon Catchment, the collection of new wetland datasets, and the development of a novel wetland classification scheme, which will allow Avon wetlands to be classified on the basis of their conservation value. The results of this project will inform both conservation planning (high value wetlands) and drainage evaluation (low value wetlands).

New South Wales

Dr. Andrew Brooks
Senior Research Fellow, Griffith University
Phone: 61 7 3735 6598, Fax: 61 7 3735 7615,
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Andrew is interested in human impacts on the geomorphology of Australian Rivers and the role of riparian vegetation and woody debris as a control on geomorphology. He research also addresses the use of wood (large woody debris) in river rehabilitation and broad scale geomorphic controls on sediment and nutrient fluxes in Gulf Rivers.

Student Representative

Rebecca McIntyre - PhD Student
School of Plant Biology, University of Western Australia
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Rebecca commenced her PhD at the University of Western Australia in Perth in early 2004, and maintains research interests in; stream and landscape ecology, biogeochemical cycling in intermittent stream and riparian systems, microbial community dynamics and arid and semi-arid zone management

The following executive members have been re-elected:

Brenton Zampatti (SA)
Barbara Downes (Vic)
Danielle Warfe (Tas)
Harry Balcombe (Qld)
Michael Reid (ACT)

EDITOR'S NOTE

Well, it's my first shot at this, so forgive me my mistakes - I promise I'll get better!! By way of introduction, I have recently been appointed as lecturer in aquatic ecology at Monash University. I have come to Monash via a post-doc at the University of British Columbia in Vancouver and a two year stint as a private consultant. I completed my PhD with Colin Townsend at the University of Otago in Dunedin in 2001.

As I'm a New Zealander the following editorial changes will now take effect:

Fish will now be spelt 'fush'
Six will now be spelt 'sex'
All references to Australian Rules Football will be stringently edited.
All references to sheep will be stringently highlighted.
A drought will now be considered as any three day period without rain.

With all that in mind I look forward to bringing together the news, views and salacious gossip of the ASL for your edification and amusement. Thank you to Emma McKenzie for her service in this role and to all the contributors that have helped my transition into this task. Remember that contributions are always welcome, particularly if you have traveled somewhere exotic and interesting, have received an award or know someone who has, or if you head one of the many aquatic research labs around the country. **The deadline for the next edition will be March 1st.**

This edition comes at a time when our awareness of the scarcity of our water resources is at an all time high. The ongoing drought is both a challenge and an opportunity. The challenge is to care for our aquatic resources and to maintain the impetus for the allocation of environmental flows in the face of increasing demand. The opportunities are to study a genuinely extreme environmental event first hand, and to use the public and politicians' heightened awareness to bring aquatic issues to the forefront of resource management planning. Agencies like FASTS (see report later) are doing a great job in that capacity, and as a newly arrived outsider there are some exciting changes in water policy going on. I look forward to an exciting year ...

On that note, I would like to wish everyone a very merry festive season, and look forward to your contributions in the New Year.

Ross Thompson

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Membership Information and contact details of the Regional Executive Members can be found at the back of this Newsletter.

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"We're lucky.This stream could be next to a paper mill instead of a brewery."

ANNOUNCEMENTS

RETIREMENT OF ASSOC. PROF KEITH WALKER

Assoc Prof Keith Walker of the River Laboratory at the University of Adelaide

commences long service leave from 3 November 2006, prior to his official retirement in mid-2007. His colleagues and friends wish him all the best in the next phase of his illustrious career, wherever it may take him! Keith leaves an amazing legacy of inspired students, highly successful degree candidates and a network of colleagues, friends and former students who are taking the messages of river ecology around Australia and into international connections. We wish him new and exciting opportunities to use his amazing knowledge and to do all the things he never had time to do while looking after so many students !!

Keith can still be contacted at keith.walker@adelaide.edu.au

CHAROPHYTE TAXONOMY

Dear ASL members

Whom best to send this request if not limnologists who always have their feet in the water?

Here, at University of Wollongong, we are starting a project to study the phylogeny and taxonomical relationships of Australian charophytes based on morphology (plant and oospores) and molecular analyses.

As you may know, they are the sister group of the land plants, playing a very important role in ecosystems and with many new species yet to be discovered (at least that is what is happening with the genus Lamprothamnium, which likes environments with changing salinity, inland or coastal!). Most of the species like freshwater, but others can tolerate salinities of 10-15 g/L, and some up to 70 g/L !

I am appealing to your kindness, as every wetland may be home to a new or rare species!

For those who can recognize a charophyte, please collect some specimens and some sediments to send to us. If not, or the water-bodies you are visiting are dried (not surprising), please collect some surface sediments from the shoreline and/or deeper part. About 100 g is enough, and after inspecting the sediments we will attempt to germinate the oospores in the lab. The information required for each sample is locality, collector and date, water depth, and conductivity/or an approximate salinity (of course if you record other ecological parameters it will make easy for us to culture them!).

Please do not hesitate to contact me if you are willing to collect charophytes/sediments, for more details. Also if you need containers, plastic bags, etc.

Many thanks for your help.

I take the opportunity to wish the members of ASL a happy, prosperous and fructiferous 2007.

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International Research Group on Charophytes: http://irgc.uow.edu.au/

2006 ASL CONFERENCE - ALBURY

The 45th edition of the ASL conference went off without a hitch in Albury in September, with the organizing committee led by Ben Gawne ensuring that a good time was had by all. Thanks for the Murray-Darling Freshwater Research Centre, La Trobe University and Charles Sturt University for hosting and organizing. Some of the details were reported in the last newsletter, but here are a few more for the record:

ASL MEDAL WINNER:
Assoc., Prof. Jenny Davis (Murdoch Uni.)

EARLY CAREER EXCELLENCE AWARD
Dr. Fran Sheldon (Griffith Uni.)

'APPLE PRIZE' WINNER
Dr. Ross Thompson (Monash Uni.)

STUDENT PRIZE WINNERS

The panel of 19 judges, spanning a wide range of limnological expertise in inland water biota, ecology, and management, assessed about 11 talks each. This year's talks and posters were consistently of a high standard but the judges were able to agree on the following awards:

1. **ASL award for best Hons presentation:**
Rose Barrett (La Trobe University) with Honourable Mentions to Naomi Kerp (Murdoch University) and Michael Peat (University of Canberra). Special mention to Danielle Smith (La Trobe University) for an extraordinary talk by an undergraduate student doing a summer scholarship project

2. **ASL award for best Poster presentation:**
Kristin Connell (University of Sydney)

3. **ASL award for best Masters/PhD presentation:**
Sarah Mika (University of New England) with Honourable Mentions to Suzanne McDonald (Charles Sturt University) and Rebecca Lester (Monash University)

4. 'Marine and Freshwater Research' journal award for best interdisciplinary presentation:
Joanne Clapcott (University of Tasmania)

5. NSW Murray Wetlands Working Group student prize for best wetlands presentation:
Bea Sommer (Edith Cowan University)

6. Society for Conservation Biology student prize for best conservation presentation:
Tanya Rankin (University of Sydney)

Report presented by Andrew Boulton on behalf of the Student Judging Panel, ASL 2006. Also wish to record warmest thanks to the judges for their careful work and input and to Rhonda Sinclair and Lyn Smith for their cheerful, timely, and efficient organization of student details, emailing changes/timetables and arranging the meeting room.

2006 DOOR PRIZE REPORT

Welcome to the 2006 Door Prize presentation. For those of you new to the society or the ASL conference, the Door Prize is presented to the most memorable thing that happens at the conference for the year.

Many years from now, most of you will not remember much about this conference. Memories of talks will fade, but there will always be one thing that sticks in your mind and be forever associated with Albury – the winner of the Door Prize.

And when you get back to work, the first question your colleagues will ask will not be "what was the best talk?". Nor will it be "did you learn anything interesting?". No. The first question will always be "who won the Door Prize?"
And should you win, you will join the exalted few who will go down in the ASL collective memory for years to come.

Who can forget the Line Dancers at Jenolan Caves? Who could forget Rob Dupres and the treated sewage at Rottnest Island? Or the lawn bowls experience at last years Hobart conference?

What else happened at these conferences? Who can remember? But we will always remember the Door Prize winner.

And there have been a few contenders for this years prize.
It's a little known fact that the Murray-Darling Basin is an active geological area. How else could you explain that Albury appears to have been transported to the

"centre of the Murray-Darling Basin" according to the opening speech of Ian Sinclair.

The traditional nomination for obscure ordination plots was, in fact, sewn up well before the conference even started. The Student Prize chair, Andrew Boulton, actually managed to ordinate the myriad combinations of judges and students to produce a haphazard random set of meaningless points with a stress of 0.34.
Mind you, he faced serious competition from a number of speakers who put up similarly seemingly random ordinations, but claiming that ANOSIM conclusively proved that the mixed-up mish mash of points actually showed ... no, don't get me started on that.

We always reserve a nomination for a revered overseas guest.. This year, Klement Tockner left us with the great unanswered questions of the conference. In particular, "how do you tag a tadpole?", "who do you get to tag 30,000 of them?" and especially "whey were you surprised when none of them survived being thrown into the riparian forest?"

In the 3 great Terminator films, the machines take over the world. This year, we have clear evidence that this has started already. In Peter Rose's talk, the remote control suddenly took over the presentation, moving backwards and forwards between slides in a manner totally unconnected with the actual talk. You have been warned.

We all know that ASL is a socially responsible organisation. Even to the point of encouraging the safe-sex message. Why else would the Conference Organisers include a condom in the registration pack? There is a saying in the rest of Australia that the men in Albury are ... somewhat different. I didn't realize just how different they are.

What else have we?
Barb Downes once again threw the galaxiids among the trout with a challenging talk on the connection between causality and correlation. This was followed by a mad dash to the IT desk by speakers wanting to change their talk title from "flow dependent taxa" to "maybe flow related taxa, but we're not quite sure."
The award for courage must go to Margaret Hart for finally giving a talk at an ASL conference. And making some very valid points about how we as limnologists should be interacting with the public more. I believe the take home message was that we needed to spend more time in country pubs, an idea enthusiastically embraced by all present.

Gender swapping is a major worry for managers of the North Sea Fisheries. This year we have had our own version, with Ben Gawne seen sheepishly emerging from the women's toilet. And a bit later, with Jane Roberts doing the same from the men's.

The Door Prize Collective thought Darren Baldwin had finally gone mad. Not for the law degree, but for continually making asides to the projector screen during his talk. He was apparently talking to an imaginary friend called Peter, who lives in

the back of the theatre and can mysteriously make slides change focus. His psychosis was, however, quite convincing. At one point in the talk, even members of the audience seemed to hear Peter's voice coming from somewhere at the back of the stage.

Andrew Boulton (again) always provides some ASL highlights. The sight of Andrew wearing shoes as a ploy to a Door Prize nomination wore off years ago. And his attempt at subliminal advertising of ASL merchandise was equally weak. It won't work. But I do seem to have purchased the entire remaining stock of ASL mugs left over from the last time the conference was held in Albury ....

And that's about it. Memorable stories from the 2006 ASL Albury conference. They are memorable, but only in the context of a goldfish. Most of these will be forgotten tomorrow.

But there was one thing that might be said to be remembered long from now. All science is in the pursuit of the truth. We all struggle away looking for patterns in data that will give us some insight into the world around us. We often come to some conclusion, but still wonder if it is the right answer. Invariably we find we are a little bit right, but mostly wrong. These experiences lead to the oft repeated answers to questions posed in workshops – "I don't know" or "I couldn't say for sure." (not to be confused with "I do not recall" which has a completely different meaning).

So what would we give for an oracle! A new guru! Some-one or something to assuage our inadequacies and uncertainty. To give us the "true answer".

And so we give you MLLE (Multiple Lines and Levels of Evidence). The only decision framework and software package ever to win the Door Prize. The only method that claims to lead us to the "true answer" to environmental and ecological questions.

Congratulations top MLLE and all who sail in her.

The 2007 conference will be held in Queenstown New Zealand

Photos by Barry Hart and Munique Webb

POSTCARDS

Lake Baikal, Siberia - The deepest and the oldest fresh water Lake on Earth: the 19th conference of the International Society for Diatom Research

Who can resist an opportunity to visit Baikal in Siberia - the deepest Lake on earth, with several species of endemic fauna and flora- a lake 1700 m deep and well oxygenated to the bottom-the oldest , over 30 million yrs of age, holding the largest single volume of freshwater on our planet. Such an opportunity arose in the form of the 19th International Diatom symposium held in the southern shore of Lake Baikal at the end of August this year.

Over 170 diatom researchers from 45 nations gathered at the village of Listvyanka on the shore of Lake Baikal, 70 km from Irkutsk the nearest airport, 6hrs flight from Moscow into the mysterious land of eastern Siberia. Myself and Prof. Jeremy Pickett-Heaps (Melbourne University) represented Australia in the diatom conference.

This was my second visit to Siberia. I was in northern Siberia in 2002 but in a totally different landscape dotted with salt Lakes to attend the 8th conference of the International Society for Salt Lake Research(ISSLR). So Siberia is a vast varied land in spite of prolonged cold winters with frozen rivers and lakes for half of the year..

The roaring" inland sea of freshwater "as often aptly described, the Baikal embracing the green hills surrounding it, was in its full glory at the end of the Siberian summer coinciding with the tail end of Australian winter and pleasantly sharing comparable temperature. But we did have a bit of taste of Siberian weather and storm when we went out into the Baikal in a ship for the mid conference excursion.

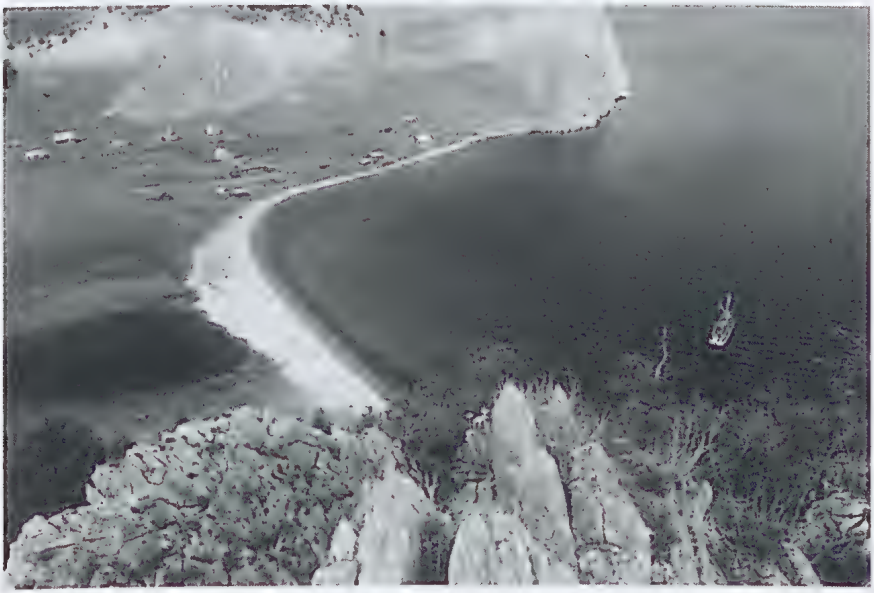
After crossing the Lake we landed at the edge of a forest. Then came the rain and a storm with all its fury, as we were taking a relaxing walk through the forest alive with colourful flowers, turning the cheap plastic umbrella, which I was sharing with a charming diatomist from Venezuela into a dysfunctional parachute. Then we were called in to fetch wood and light a fire to warm ourselves in readiness for the Picnic lunch in a disused farm shed. But it was all fun when we were provided with ample supply of Vodka, which the natives treated like water. All my diatomist colleagues would have eternal life if the toasts proposed by our hospitable hosts came true as vodka was flowing freely.

The scientific program provided a variety of topics ranging from taxonomy, ecology to genomic and proteinic.

I was highly impressed by Russian postgraduate students' contributions, as I was one of the judges for student's presentation awards. In addition to presenting an oral paper on diatoms of extreme environments in Australia, I displayed a poster

on the Diatom Flora of Queensland –a project I am completing currently. Prof Pickett-Heaps provided running commentary on the incredible videos he has been taking on the secret lives of algae and diatoms every evening. It was a week of fully packed diatom talks, poster papers, workshops and videos, without any distractions, as all delegates stayed in hotels at the shores of Lake Baikal. The Locals have their folklore and legends built around the lake, which provide them with a sustainable fishery, source of water, electricity and lately tourist industry. Over 250 endemic diatoms and 500 species of fish live in Lake Baikal along with freshwater seals and green branching sponges, an amazing array of invertebrates and algae. The university of Irkutsk and the Siberian Branch of Russian Academy of Sciences have several research programs in collaboration with foreign scientists and agencies based on the limnology and biota of Lake Baikal. As a local folk song says, "my heart is with Baikal "– a mysterious yet loving force of Mother Nature so transparently enchanting yet furious at times.

Jacob John
Postgraduate coordinator
Dept of Environmental Biology, Curtin University of Technology



A BIT OF FUN ~ KEEP THOSE LETTERS COMING !!

Ask Onmil all the tricky limnological etiquette questions you really want answered!!

Dear Onmil
I am a new student in aquatic ecology but I suspect the weather gods are conspiring against me. Every time that I try to find study sites I am faced with nothing more than a dusty gully at the bottom of a valley. How am I going to advance to fame and fortune as an aquatic ecologist if I can't find any water??
Dusty and confused

Dear Dusty and Confused

I see your problem. I myself have many friends who have begun projects in the last few years on topics ranging from 'ecology of golden perch' to 'life history characteristics of chironomids' and all of whom now work on the project 'effects of drought on ... (insert any animal or stream here).' Your options are really as follows...
Wait the drought out. This is after all a 1 in 1000 year drought. Now my detailed knowledge of probability says that that means that the next 999 years must be drought free.
Use MLLE (Multiple Lines and Levels of Evidence) (see above). That way you won't even NEED data to know what is going on. Really, MLLE does it all.
Retire to a nearby pub to think about it. This is an age old approach, and I really can't see it failing now. After all, Onmil has been doing this for years, and apart from a liver the size of a Smart car, it hasn't done me any harm.

Yours sincerely

Onmil

* Onmil apologises for any offence caused to perch, chironomids or MLLE. The Smart© car trade name is used absolutely without permission or any reference to copyright law. Please don't sue me.

Ask Onmil
All the tricky limnological etiquette questions you really want answered.....

INFORMATION FROM AND FOR MEMBERS

Aquatic cluster report on FASTS AGM and Board meeting, Nov 20-21, 2006, Canberra

Although formal minutes will be released later, this brief report expresses just a few personal observations of material covered during these meetings that may be relevant to constituent members of the marine and freshwater societies that comprise the aquatic cluster.

From the President's report, science and mathematics education in schools was not a topic of interest to either the previous Minister or Chief Scientist but is of great interest to the current Minister and Chief Scientist. FASTS held a successful scoping workshop in August which will lead to a detailed policy paper to be released before SmP 2007 investigating ways to build on existing science education initiatives to strengthen both formal and informal science education. This is a topic in which aquatic cluster members may have some interest, especially given the appeal of marine and freshwater issues to school students.

Some of FASTS 'wins' this year have been to get an earlier date of ARC announcements (Oct instead of Nov/Dec) and revision of the RFCD and SEO research classifications used by the ABS to get a more appropriate reflection of current scientific research. However, the revision of these codes is unlikely to be soon enough to ensure the revised codes are in place for the implementation of the RQF if that is implemented according to the current timetable. Some members of the aquatic cluster have identified that current RFCD codes poorly capture current vibrant research areas in marine and freshwater science. Please send any comments on new codes to Bradley Smith, FASTS, as soon as possible.

There was a question during the AGM about the degree to which we value and support technical staff. Although this was from the nuclear physics perspective, it got me wondering about what our societies do to assist support, training, or even encouragement of technical support and its career development. Is this an initiative that might be of interest to any of our constituent societies? Do our societies cater for technical expertise given its fundamental importance to our science?

The next SmP will on Tuesday 27th and Wednesday 28th of March, 2007. The two key factors affecting the context of SmP 2007 are the Federal election and the release of the Productivity Commission's final Science And Innovation report in March. Both major parties and the media will be in election mode throughout the year. This means politicians will be even more focused on issues of relevance to their electorates or issues seen as 'vote shifters' (and science funding is not a vote shifter). They will be receptive to clear constructive policy suggestions

on issues of immediate public interest such as local effects of climate change and water but concomitantly, they will be hostile to time-wasting or arguments on issues they believe are electorally irrelevant. There were discussions about what scientists want from SmP and whether we should change the current model. It raised in my mind – what do the members of our aquatic clusters want from SmP? Do we want our members to actually lobby for aquatic issues or is it more useful for us to be helping some of our members become more politically-savvy? In our societies, do we want to be 'grooming' some of our members to be political advocates for our field – the future 'Peter Cullens'? What options do we have to ask for more support for our early career scientists? And what sort of support would we want?

FASTS reported that a 30% decline in numbers of members across 25 randomly selected societies has occurred since 1994. So one workshop at this year's AGM dealt with answering: 'why are numbers declining in scientific societies?' Some of the reasons proposed were:

a) Local societies are unable to compete with international societies
b) There is a perceived lack of value for money (what do we get for our money?)
c) Our societies revenue is limited by poor administration (are all members financial?)
d) We have outdated constitutions and over-complex rules.
e) There may be financial mayhem (suggested membership fees be directly debited so that members do not forget to renew membership) that hampers revenue generation.
f) Societies lack succession planning (what are the future goals of your society? Are these held by the Exec?)

Do any of these ring true for your society? We then had a stimulating talk by a consultant who works with societies to increase their membership. He spoke for an hour but in a nutshell, I felt his message was: To improve society membership you want to recruit, retain, and renew/reactivate members and increase revenue. Societies can be seen as businesses that are 'selling' membership and have a system for everything you do (documenting what works, a good data base). Need specific objectives in recruitment. Who are your prospects? When you have taken on a new member do you follow up that member a few weeks later to see how they are going? Encourage everyone on the committee to bring in another member. Do you have a high profile member who can provide publicity for promotion? How can you retain members? Satisfied members will bring in other members. Listen to and act on their complaints. Get some of your members to ring up people who have not renewed. Even if they don't renew, you'll find out why.

There were questions raised from several other societies about the transparency of ARC grant assessments and there will be a more detailed report by

FASTS at the next meeting early next year (I'll keep you posted). Bradley Smith (Exec Director) is establishing a network of societies concerned at the apparent drop in capability in commercial and research areas that need expertise in taxonomy. I said that our aquatic societies would all be keen to be represented in this network and I have volunteered to help on this initiative. Please, if you have any specific concerns or examples where a lack of taxonomic expertise is hampering your marine or freshwater research, let me know. More significantly, send me any ideas you might have about ways FASTS could help address these problems.

The FASTS policy is now out on its new website. Newsletter editors are encouraged to access sections of this document to publicise the roles, mission statements and planned intentions of FASTS.

It is time for a new cluster representative from the marine field. I shall attend my last meeting early next year and am looking for someone to replace me. The duties are not onerous - basically, you gather information from the four societies and prepare a report three times a year for presentation to FASTS, you attend the meetings (usually Melbourne, Sydney and Canberra), and you have some involvement in aspects of SmP or special committees of the FASTS board that deal with aspects of interest to you professionally or in general. Your travel costs are covered and you meet an excellent network of colleagues across the other societies. Please contact me if you are interested and I shall send you more details.

Andrew Boulton 23rd Nov 2006

REPORTS FROM THE TRENCHES

MONASH AQUATIC RESEARCH LABORATORY (MARL)

The Aquatic Group at Monash continues to grow. In 2007 we move into a new phase as MARL (Monash Aquatic Research Lab), a grouping of the aquatic researchers within the School of Biological Sciences including; Sam Lake, John Beardall, Ross Thompson, Paul Bailey, Nick Bond and Paul Reich together with associated students and post-docs. MARL will build on existing associations with the Australian Centre for Biodiversity and the Water Studies Centre to continue to develop our strengths in landscape ecology, urban stream ecology, and restoration ecology in particular. We have several new PhD students joining us including Elise King (assembly dynamics in intermittent streams), Sam Imberger (organic matter dynamics in urban streams), Suzie Ho (food web consequences of *Gambusia* invasions), Amber Clarke (biology of first order streams), and John Moringello (dispersal and recruitment of fish) along with a suite of Honours students working on everything from the ecotoxicology of heavy metals to the sociology of Waterwatch groups. All of this new blood is much needed with the departure of Sarina Loo to DSE and the imminent completion of Dave Reid. On the wetland front we have also said farewell (temporarily we hope) to two of our research fellows, Elisa Raulings & Kay Morris. Karen Cooper continues her work in the field and the lab, as does Beth Hawkins. Stacey Parkinson and Andrew Kramer have finished their Honours projects and have both moved on to positions at EPA.

Sam Lake continues to work on his synthesis of the effects of drought on streams, further advancing the work achieved during his Land and Water Fellowship. SAM?? Ross Thompson is beginning a project in collaboration with Bob Wong (Monash Uni. behavioural ecologist) and Taarmo Raadik (Arthur Rylah Institute) on a new suite of galaxiid species in northern Victoria. Paul Reich (together with Sam Lake & Matthew Johnson) continues to work on evaluating the effectiveness of riparian restoration on lowland streams. New experimental sites in southern NSW will be added in 2007. Nick Bond (eWater) is beginning a major eWater project modeling the effects of dispersal limitation at a landscape scale. Nick, Paul, Sam and Damien McMaster are also examining the ecological impacts of flow regime reversal within the Broken-Boosey Creek system in northern Victoria.

Another exciting development at Monash is the creation of a new research facility; the Aquatic Ecosystems Research Laboratory. This will include a suite of micro and mesocosms and the opportunity to work in greater detail on ecotoxicological and physiological questions in aquatic ecology.

MARL looks forward to a new year with some exciting new people and new projects. We hope that your coming year is just as exciting, and that everyone has a happy festive season.

Ross Thompson (ross.thompson@sci.monash.edu.au)

Nick Bond and Paul Reich put in the hard yards.

The Monash mob (Sarina Loo, Stacey Parkinson, Gareth Belton, Ross Thompson) save water at ASL in Albury by concentrating on spirits.

AUSTRALIAN RIVERS INSTITUTE, GRIFFITH UNIVERSITY, BRISBANE

After recently completing his Honours, Brett Taylor has joined ARI as a full time Research Assistant. Brett will be working on an eWater CRC project (F1) with Christy Fellows and Wade Hadwen, which will see him spending quite a bit of time collecting samples (biogeochemistry and food webs) from sites within the Logan-Albert catchment over the next little while. In addition, Brett will also be devoting some of his time to visiting pristine aquatic sites within National Parks as part of his involvement in Wade's Sustainable Tourism CRC project that aims to examine visitor impacts in and around focal aquatic sites. Courtenay Mills recently completed her Honours project with Wade Hadwen and Jane Hughes. Courtenay investigated the population genetics of two glassfish or estuarine perchlets (*Ambassis marianus* and *Ambassis jacksoniensis*) in estuaries and tidal creeks in south east Queensland. In other student news, and after months of waiting, Mark Spears has finally started into his Honours project with Wade Hadwen and Mark Kennard. Mark will be investigating the food webs of streams in the Logan-Albert catchment, with particular emphasis on the influence of the invasive carp (*Cyprinus carpio*) on pathways of carbon and nitrogen flow. Mark will also be investigating food web dynamics in some sites in the nearby carp-free Coomera River catchment and hopes to learn more about the ecology and impacts of carp through this comparative approach

As a follow-up to her 2005 dry-season sampling in the Southern Gulf, Catherine Leigh completed another successful field trip to the region this September. Catherine's PhD project is investigating large river function in the Australian tropics, focusing on macroinvertebrates and carbon flows. A major aim of the project is the development of conceptual models of natural river function that will also be used to predict changes based on future land use scenarios. Catherine's study region is the lower reaches of the Gregory, Flinders and Cloncurry Rivers and their surrounding floodplains. The Gregory is a permanently flowing aquifer-fed river, where as the Flinders and Cloncurry Rivers become reduced to disconnected turbid waterholes during the dry. Studying these two different systems will provide greater insight into the range of function that currently exists in the floodplain-river ecosystems of the Australian tropics.

Adam Kereszy is currently somewhere in Western Queensland catching fish in the Lake Eyre Basin continuing his PhD examining fish recruitment in arid rivers. His vehicle was last seen immersed in a sand bar near Longreach. Perhaps its just a new way of investigating whether fish aestivate under the sand when it gets hot.
Although it is a while back this report missed the last edition of ASL news, but for the virus junkies, here goes. Peter Pollard, Loretta Young and Jeffrey Argo attended the ASLO Summer Meeting in the city of Victoria located at the southern

tip of magnificent Vancouver Island, British Columbia, Canada. The ASLO meeting was to provide a forum for presentation and discussion of research on the theme: Global Challenges to Oceanography and Limnology, with sub-themes including climate change, ecosystem structure and function, linkages among systems, achieving and maintaining healthy water, improving management of aquatic resources, and communication and education. As expected, there were many interesting presentations discussing bacteria and algae in the context of these themes. Of particular interest was a plenary address in part emphasising the importance of viral activity, as well as 2 full days of presentations on the subject of viral ecology within which all three presented the following work: Loretta and Peter: Identification of a virulent cyanophage specific for the cyanobacterium *Cylindrospermopsis raciborskii*; Jeff and Peter : Viral impact on the cyanobacterium *Microcystis aeruginosa* in a subtropical Australian lake; Peter :Viruses short-circuit microbial loop in a freshwater subtropical Australian river.

Over the past 50 years research has shown that the global bacterial biomass ultimately mediates many ecologically critical metabolic pathways. The stimulating presentations at ASLO have reinforced that bacteriophage regulate and maintain the diversity and function of this biomass. Phages Rule!

Stephen (Harry) Balcombe

BIOGEOCHEMISTRY GROUP, WATER STUDIES CENTRE

It's been a highly eventful year in our group. We've had a successful PhD Completion: Dr Ernie Harbott finished her thesis on enzymatic characterization of organic matter across an urban gradient and to celebrate has moved to Peru to live! Two other students, Bonnie Atkinson (Ecosystem Responses to Stream Rehabilitation in the Granite Creeks) and Asep Saefumillah (The Release of Organic Phosphorus from Aquatic Sediments, cosupervised by Ian McKelvie) have submitted their PhD theses and await the examiners' reports. Sam(antha) Imberger, cosupervised by Chris Walsh, finished her BEnvSci Honours project on the mechanisms of leaf litter decomposition across an urban gradient and received a high first class Honours mark - Sam is returning to start a PhD in 2007. Other students, Sulfikar, Colette Thomas, Sarah Alexander and Shane Perryman, are in the throes of writing up their theses, which leaves the labs relatively quiet at the moment. Disturbing this calm through their hard work(!) are Katrina Lansdown (PhD project on using nitrogen isotopes to trace the origin of nitrate in surface waters, cosupervised by Ian Cartwright in Geosciences) and Chamindra Vithana (MSc project looking at the role of organic matter and microbial activity on nutrient dynamics in the Royal Botanic

Gardens in Melbourne). Robyn Overall is continuing her PhD project on the development of Bayesian models for investigating the effectiveness of Melbourne's stormwater wetlands for nitrate removal. Another departure from the group this year is Brad Scott who completed his BEnvSci Honours project, cosupervised by Richard Morrison, on using MIMS to detect volatile organic carbon compounds and dissolved gases in aqueous samples, including sediment porewaters. The MIMS instrument is now nearly at the point where we can start directly measuring denitrification – so stay tuned!

The group has also contributed to airline profits with Mike and Bonnie presenting talks at the NABS conference in Anchorage in June, while Colette went to the ASLO conference in Vancouver at the same time. It makes me wonder why these two organizations run concurrent conferences rather than have them sequentially so we can attend both – perhaps they don't like each other? Barlah Rumhayati has just returned from Java where she was collecting samples from the recent, horrendous mud flows as part of her PhD project on DGT analysis (cosupervised by Ian McKelvie).

Best wishes to everyone for 2007! Let there be rain.
Mike Grace
(Mike.Grace@sci.monash.edu.au)

ENVIRONMENTAL WATER RESERVE AND RIVER HEALTH DIVISION, DSE, VICTORIA

Department of Sustainability and Environment

Sarina Loo and Sabine Schreiber have now both defected (voluntarily!) to the 'dark side' to work in the policy section of DSE. At this stage both are still smiling and are thoroughly enjoying their roles in Jane Doolan's River Health group. Sarina is working with Gary Howell in the River Health section of the group, on projects to do with the economic valuation of rivers, the review process for river health strategies, and general policy aspects of looking after river health. Sabine is working in the Environmental Water Reserve part of the group (the term for water that is to benefit the environment that is now enshrined in legislation in Victoria) with Paul Bennett, and is now the "bureaucrat from head office" overseeing a range of other projects. Projects include a statewide program carried out in conjunction with five of Victoria's ten Catchment Management Authorities and the eWater CRC on the effectiveness of different degrees of environmental flows in eight Victorian rivers (provided it ever rains again).

Sabine Schreiber

AUSTRALIAN CENTRE FOR TROPICAL FRESHWATER RESEARCH, JAMES COOK UNIVERSITY, TOWNSVILLE

Damien Burrows, Vern Veitch and Colton Perna organized a 5-day course on 'Principles and Techniques of Electrofishing" in Townsville in late October. The course was taught by Alan Temple of the US Fish and Wildlife Service National Conservation Training Center. Over 30 people attended from all states of Australia, making for a very successful week and a high degree of positive interaction and networking between participants. Three different electrofishing boats and two backpacks were on display for comparison. Alan has taught this course for many years in many countries and we highly commend this course to all involved in electrofishing.

Colton Perna and Mick Pusey recently wrapped up a survey of the freshwater fishes of the Norman River catchment in the southern Gulf of Carpentaria and a brief trip to the Normanby catchment on eastern Cape York. The Norman catchment has never before been formally surveyed for freshwater fish. These field trips are part of the North Australia Freshwater Fish (NAFF) project between ACTFR, Australian Rivers Institute at Griffith University and NT Fisheries.

Vern Veitch and Alan Webb have been monitoring the spread of tilapia throughout the Burdekin catchment, just west of Townsville, since their introduction there in 2003-04. The tilapia have shown themselves to be surprisingly adept at migrating upstream, colonizing tributaries up to 55km upstream even though they only flowed for very short periods (days to weeks) in the wet season. Over 400km of river length has now been confirmed to have tilapia present.

Dom Loong and Cameron Armstrong wrapped up 23 days of intensive water quality sampling in the Walsh River catchment (Gulf of Carpentaria) in November and within days of return, backed up for a series of additional field trips to the Burdekin catchment and the Gulf country to wrap a very busy and tightly packed end of dry season field schedule.

Damien Burrows

FRESHWATER GROUP, UNIVERSITY OF TASMANIA

The grand news from here is that Adam Uytendaal has completed and passed his Ph.D. thesis on modelling the resuspension dynamics of Lakes Crescent and Sorell. The revisions were passed cum laude mere seconds before he became a dad for the first time, and officials in the University administration are fondly hoping that the bound copies will be with them shortly.

Anne Watson is progressing well in her Ph.D. studies comparing detrital dynamics, and possibly benthic algae, in regulated and unregulated upper reaches of the Macquarie River, eastern Tasmania. She will be collaborating with a research team from the Department of Primary Industry and Water led by Dr Danielle Warfe who are using this river along with two other systems to develop a more holistic approach to developing environmental flows. Anne's contribution will be to assess the potential of incorporating measures of ecosystem processes into such a scheme; however, it would be nice if we got some RAIN to produce some RUNOFF and a few HIGH FLOW events. Otherwise, this could be turning into an inadvertent drought project.

Leon Barmuta is mostly changing nappies, getting insufficient sleep and guiding three Ph.D. candidates to completion. Rick Stuart-Smith and Scott Hardie are oh so close to completing their theses on golden galaxias, and Jo Clapcott is marshalling a small truckload of ecosystem process information on the impacts of forest harvesting in small headwater streams. While mentioning that project, John Gooderham is hoping that his revisions to his conceptual opus on small headwater streams have placated the gods at JNABS, but is mostly enjoying life on a one-year contract job at DPIW.

In between times, Leon Barmuta is working up some data on charophytes and isopods endemic to Great Lake with researchers from Hydro Tasmania and the Inland Fisheries Service. This was all meant to help get an ARC Linkage off the ground, but the drought has meant a shortage of funds, so we're praying even harder for rain.

Kaylene Allan has just finished her Master's project work examining salinity tolerances of some Tasmanian invertebrates and tallying those data with their known field distributions. Again, the examiners were very impressed, and we have fond hopes that Kaylene will be able to switch from her career as a dietician into something freshwatery soon. And our honorary freshie Louise Cromer has finally completed her microscopic examination of the historical benthic fauna of freshwater Antarctic lakes. Lou has packed her results and references and headed 'south' for the summer, hopefully to return from Antarctica with yet another PhD thesis for the freshwater group.

And... coming to a number of lakes near us soon will be a small team of Danish shallow lake ecologists led by Erik Jeppesen and Martin Søndergaard. It's called Project Galathea and is investigating patterns of community structure and function in lakes on islands around the world, with the inevitable "climate change" thread running through the programme. If you happen to be in Tasmania anytime for the last 3 weeks in January and want to help out with some sampling, drop Leon.Barmuta@utas.edu.au a line.

Have a good Christmas!

Joanne Clapcott.

CHARLES DARWIN UNIVERSITY

The wet season hasn't really started yet but the past few weeks have seen Darwin awash with a flood of water experts attending various meetings to consider the future of water management across northern Australia.

On November 30th the National Water Commission held a workshop for researchers and managers to better understand the key challenges encountered in implementing the National Water Initiative in Australia's north and to identify opportunities for coordinated action. The workshop heard presentations from water planners from the NT (Ian Lancaster), Qld (Lyall Hinrichsen) and WA (Dave Munday) Governments outlining the strikingly similar challenges that each jurisdiction faces in implementing the NWI in northern rivers. Anne-Marie Wilson (NWC) and Jim Donaldson (Land and Water Australia) Michael Douglas (CDU) outlined opportunities for action arising from the Tropical Rivers and Coastal Knowledge (TRACK) program (see below) and Keith Bristow (CSIRO) outlined the activities of the North Australian Irrigation Futures (NAIF) program. Joe Morrison (North Australian Indigenous Land & Sea Management Alliance) described the challenges and opportunities for Indigenous people presented by the implementation of the NWI in northern Australia and outlined the role of NAILSMA and the Indigenous Water Policy Group. National Water Commissioners David Trebeck and Peter Cullen facilitated an open discussion session and summarised key outcomes.

The NWC workshop set the scene nicely for the North Australian Water Use Summit (NAWUS) which was held on November 31st and December 1st. The Summit was organised by Charles Darwin University and the NT Government's Department of Natural Resources, the Environment and the Arts and brought more 60 water experts and scientists from around Australia to consider he future of northern water resources. Keynote addresses on the first day warned about

complacency in regard to the abundance of water in the north, dismissed as fanciful those visionary schemes of piping water to the south. Peter Cullen said the south failed to understand conditions in the north and had developed a misplaced belief in a tropical bounty that could be harnessed for their own use. A further day was spent workshopping ideas about strategies and management planning that will be summarised into an action plan which will be tabled for consideration by a meeting of State and Territory Ministers responsible for northern waters next year.

On December 4th and 5th CDU hosted the first meeting of the Tropical Rivers and Coastal Knowledge research hub (TRACK). The meeting brought together 50 people to further develop a research program aimed at providing the knowledge needed to sustainably manage the rivers and estuaries of the wet-dry tropics. TRACK is a new collaborative research program with $16 million funding from the Department of Environment and Heritage, the National Water Commission and Land & Water Australia and substantial additional funding from partner organisations. TRACK is led by Michael Douglas, (CDU), Stuart Bunn (Griffith Uni.) Peter Davies (UWA), Jim Donaldson (LWA), Stephen Garnett (CDU), Sue Jackson (CSIRO Sustainable Ecosystems), Joe Morrison (NAILSMA) and Jon Olley (CSIRO Land and Water). The TRACK consortium includes researchers from all these organisations as well as CSRIO Marine and Atmospheric Research, eriss, AIMS, Geosciences Australia, JCU, and departments from the NT, Qld and WA governments. The meeting was very successful and went a long way towards planning the first four years of research, which will commence in April 2007. For more information about TRACK contact Michael Douglas (michael.douglas@cdu.edu.au).

Michael Douglas

ENVIRONMENTAL RESEARCH INSTITUTE OF THE SUPERVISING SCIENTIST, NORTHERN TERRITORY

Tropical Rivers Inventory and Assessment Project (TRIAP) Update

It has been a busy time for the TRIAP team. Sub-project 1 is near completion with the ecological typology component under development and due along with Sub-project 2 (the ecological risk assessment) at the beginning of April 2007. The various projects being conducted under the TRIAP have been presented in a number of fora over the past few months. The papers, presentations and any associated reports can be accessed from the TRIAP web site (http://www.nctwr.org.au/publications/tropical-rivers.html).

More recently a workshop was held with stakeholders from the Northern Territory Government and NGOs to undertake a sensitivity analysis of the Relative Risk Model (a spatially based method of ecological risk assessment) for the Daly River catchment. The sensitivity analysis enables stakeholder perceptions to be incorporated into the model to test model robustness.

With TRACK on-line we are focusing on bringing the data collated and analysed through the TRIAP into TRACK for use by the various themes and consortium partners. This presents us with some challenges as the data spans over the three jurisdictions of northern Australia. Two of the three TRIAP focus catchments (Daly River, NT and Fitzroy River, WA) are focus catchments for TRACK, therefore any knowledge transfer will be highly beneficial.

If you are interested in receiving the TRIAP newsletter or other project related material, please email Renee Bartolo (renee.bartolo@deh.gov.au).

Renee Bartolo

THE AQUATIC HEALTH UNIT (NORTHERN TERRITORY DEPARTMENT OF NATURAL RESOURCES, ENVIRONMENT AND THE ARTS).

The Aquatic Health Unit (Department of Natural Resources, Environment and the Arts) has undertaken a number of projects and routine monitoring during 2006. Julia Fortune was kept busy with a project investigating nutrient and suspended sediment inputs from stormwater in the Darwin Harbour catchment. Simon Townsend and Mike Welch undertook extensive field data collection on the Katherine River for an NHT-funded environmental flows project that is being coordinated by CDU. Gisi Lamche continued regular AUSRIVAS sampling and laboratory identifications during the year. Tony Boland recently joined the unit as our new technician and George Maley has commenced as a project officer for a CCI-funded project that involves development of a water quality protection plan for Darwin Harbour.

Michael Welch

COME ON FOLKS - I KNOW YOU'RE OUT THERE - WHERE ARE THE RUMOURS, RESEARCH AND IDLE SPECULATIONS FROM THE OTHER LABS IN AUSTRALIA!!??

ED.

FORTHCOMING CONFERENCES / WORKSHOPS

ENTO '07 - Royal Entomological Society Symposium on Aquatic Insects

Aquatic Insects: challenges to populations, and RES Annual National Meeting. 16-18 July 2007, Edinburgh, UK.

This International Symposium will have a diverse and exciting range of invited speakers covering topics including life-history adaptation, adaptations to extreme conditions, foraging, orientation and dispersal. The meeting will run over three days, each day consisting of a plenary Symposium session in the morning, followed by open sessions in the afternoons. Oral or poster presentations on any entomological topic are invited and all will be considered.

Visit the web site http://www.ento07.org.uk/ for more information and to register for information updates.

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Fifth Large Branchiopod Symposium

To be held at Acharya Nagarjuna University in Nagarjuna Nagar, Andhra Prasdesh, India, 16-20 September, 2007. For details contact Prof Durga Prasad: profmkdprasad@yahoo.com.

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10th International Riversymposium & Environmental Flows conference
3 – 6 September 2007, Brisbane, Australia

FIRST CALL FOR PAPERS... now open!

...Held in partnership with The Nature Conservancy, it will explore environmental flows from a science, policy, management and community perspective...

The International Riversymposium is an integral part of Brisbane's annual broad-based cultural event the Riverfestival. The Symposium presents a holistic view of river management and provides an opportunity to celebrate the ecological and social value of rivers, showcase world's best practice and balance the relationships between science, business, institutions and communities involved in river management.

Visit the website http://www.riversymposium.com for more information on submission procedures, registration and program information.

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Short course: Enhanced understanding of shallow lake ecology-interpreting sediment records of plant remains

This course, which will be held Jan 15 - 19th 2007, aims to introduce participants to the range of plant macrofossils (seeds, fruits, and other plant remains larger than about 0.5 mm) found in largely Holocene sediments in temperate Australia. There will also be some coverage of zooplankton remains, particularly as they relate to inferences of past plant cover. The course will be held at the University of Adelaide. The Australian Research Council funded Environmental Futures Network (http://nesuab.ees.adelaide.edu.au/page/) has provided generous support by funding two experts, Dr Carl Sayer and Dr Tom Davidson, both from the Environmental Change Research Centre (UCL, London) to convene the course. The workshop-like format will be relatively informal, with lectures and seminars in the morning and practical sessions in the afternoon. Emphasis will be placed on students working on their own material, although other samples will also be available. One (or more) field trips will be undertaken to demonstrate sampling and coring techniques.

Basic knowledge of plant taxonomy, ecology, and palaeoecology is highly desirable but not essential. We are now taking registrations of interest for this course (places are limited), and there is no cost involved for students. Cost for wage earners and industry representatives is $350. Please note that there may be funds available to offset travel and accommodation costs of interstate students. For enquiries or registrations please e-mail jennie.fluin@adelaide.edu.au or john.tibby@adelaide.edu.au phone (08)8303-5835.

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First announcement and call for posters

3rd International Symposium on Riverine Landscapes (TISORL) Global change and river-floodplain ecosystems

August 27 - September 1, 2007, South Stradbroke Island, Queensland, Australia.

There are a number of grand challenges facing science in meeting the knowledge needs to underpin ecologically sustainable management of river-floodplain ecosystems. Experts in river ecology, human population dynamics, hydrology and water use, climate, and bioassessment are invited to the 3rd International Symposium on Riverine Landscapes (TISORL) to discuss the implications of global-scale changes for river-floodplain ecosystems and to identify future research directions.

About the Symposium: The TISORL scientific program is organised around three themes, each constituting a symposium session featuring six or seven topical review presentations. Science themes include global changes associated with urbanisation, water use and flow regime changes, and climate changes. Cross-cutting workshops focus on key science needs relating to protection of aquatic biodiversity, connectivity and river-floodplain-coastal subsidies, flow-ecology relationships, and indicators and assessment.

The meeting includes thought-provoking plenary lectures by invited speakers to identify key issues and to set the scene for structured workshops focused around key science themes. The results of the workshops will be summarized in a plenary discussion and in synthesis publications on future science needs. Poster sessions will provide opportunities for attendees to present research relating to the science themes and workshop topics.

Invited speakers include: Emily Bernhardt, Nick Bond, Francis Chiew, Cliff Dahm, David Dudgeon, Sarah Gergel, Stephen Hamilton, Judy Meyer, Robert Naiman, Christer Nilsson, Jon Olley, Julian Olden, N. LeRoy Poff, Andy Steven, Cathy Reidy, Rebecca Tharme, Klement Tockner, Charlie Vorosmarty and Chris Walsh

Venue: The venue is Couran Cove Island Resort on Stradbroke Island, situated near the mouth of the Coomera River in the heart of Australia's fastest growing landscape. Post-symposium excursions include visits to World Heritage areas on the Gold Coast hinterland currently threatened by global environmental changes. Symposium attendance is limited to about 100 people.

Date: The symposium runs from Monday August 27 to Saturday September 1 2007. This is the week prior to 10th International Riversymposium and 2nd International E-Flows Conference in Brisbane.

Contacts: Submit your poster and/or register your interest in attending the Symposium by emailing ari@griffith.edu.au. Full registration details and costs will be announced in early 2007.

For further details contact Dr Mark Kennard (m.kennard@griffith.edu.au) or Prof. Stuart Bunn (s.bunn@griffith.edu.au) from the Australian Rivers Institute, Griffith University, or visit www.rivers.edu.au.

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Australian and New Zealand Geomorphology Group

Australasian Rivers Workshop: New Frontiers in River Research

6th to 8th February 2007, Canberra and NSW South Coast

www.anzgg.org or email jacky.croke@sciro.au

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ASLO 2007 - Aquatic Sciences Meeting

February 4-9, 2007, Santa Fe, New Mexico

The American Society of Limnology and Oceanography invites the submission of abstracts for oral and poster presentations! Celebrate ASLO's return to Santa Fe, New Mexico, by getting outside of the box for some great science and some engaging and unique events at the ASLO 2007 Aquatic Science Meeting to be held February 4-9, 2007. Register and book your travel early! In order to have your abstract considered for acceptance, you must submit before the abstract deadline of October 3, 2006. On-line submission is highly preferred at http://www.aslo.org/santafe2007

If you are not a member of ASLO, we invite you to join. By doing so, not only will you receive the benefits of this society but also be able to take advantage of the significantly reduced registration fee for members. Please visit the ASLO web site to learn more about becoming a member at http://www.aslo.org/

Debbie Bronk & Jim Elser, Co-organizers, ASLO Santa Fe 2007

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The 6th International Symposium on Ecohydraulics will be held in Christchurch, New Zealand. More than 350 professionals working in hydraulic and environmental research and applications are expected to attend this symposium.

The technical program will comprise plenary sessions, technical papers presented in the traditional format, a poster display session, and discussion forums of selected technical papers.

Visit the website http://www.conference.co.nz/ecohydraulics2007 to obtain details and registration.

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'AND SO, I CONCLUDE MY ARGUMENT AGAINST INTELLIGENT DESIGN'
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ASL VOLUNTEERS

The following members have volunteered to speak as experts on behalf of the ASL. If you wish to be included on the list please contact:
Dr R.Marchant (ASL secretary), email: rmarch@mov.vic.gov.au

Prof A. Arthington: in stream flows, ecology of exotic fishes, conservation of rare fishes. Centre for Catchment & Instream Res, Griffith University, Natham Qld, 4111. Phone (07)3875 7403, Fax: (07)3875 7615, email: a.arthington@mailbox.gu.edu.au

A/Prof P. Boon: bacteriological issues, wetlands. Environmental Management, Victoria University of Tech., PO Box 14428 MMC, Vic. 3000. Phone (03)9365 2214, Fax (03)9365 2465, email: paul.boon@vu.edu.au

Dr A. Boulton: intermittent streams, hyporheic zones, aquatic invertebrate ecology. Ecosystem Management, University of New England, Armidale, NSW 2351. Phone (02)6773 3760, Fax (02)6773 2769, email: aboulton@une.edu.au

Dr K.Bowmer: pesticides - fate and ecological impact, aquatic plant management. Charles Sturt University, PO Box 588, Wagga Wagga, NSW 2678. Phone (02)6933 2221, Fax (02)6933 2060, email: kbowmer@csu.edu.au

Dr M. Brock: temporary wetlands, aquatic plants. Centre for Natural Resources, DLWC, PO Box U245, UNE, Armidale NSW 2351. Phone (02)6773 2578, Fax (02)6773 3283 email: mbrock@metz.une.edu.au

Prof. S. Bunn: stream ecology, ecology of riparian zones, biomonitoring. Faculty of Environmental Sciences, Griffith University, Nathan, Qld 4111. Phone (07)3875 7407, Fax (07)3875 7459, email: s.bunn@mailbox.gu.edu.au

Dr M.Casanova: charophytes, temporary wetlands
RMB L620 Westmere Vic 3351 Phone 03 53506533, Fax 03 53506533 email: amncova@netconnect.com.

A/Prof J.Davis: wetland and stream ecology, ecology of central Australian waterbodies. School of Environmental Studies, Murdoch University, Murdoch WA 6150. Phone (08)9360 2939, fax (08)9310 4997
email: davis@essun1.murdoch.edu.au

Prof. P. De Deckker: salt lakes: biology, chemistry and history; palaeolimnology towards understanding past environmental change.
Dept. of Earth & Marine Sciences, The Australian National University Canberra ACT 0200. Phone: 02 6125 2070, fax: 02 6125 5544,
e-mail: patrick.dedeckker@anu.edu.au

Dr. M. Douglas: tropical freshwater ecology, intermittent streams, tropical floodplains. School of Biological and Environmental Sciences, Northern Territory University, Darwin, NT 0909 Phone: (08)8946 7261, Fax: (08)8946 6847, email: michael.douglas@ntu.edu.au

Dr S.Eberhard: Subterranean wetlands, groundwater ecology, caves, karst
Department of Conservation and Land Management, Woodvale Research Centre, PO Box 51, Wanneroo, WA 6065, Australia
Phone (08) 9405 5183 Fax (08) 9306 1641, email: stefane@calm.wa.gov.au

Dr T. Entwisle: taxonomy and ecology of freshwater macroalgae.
Executive Director, Botanic Gardens Trust, Mrs Macquaries Road, Sydney NSW 2000, Australia.Phone: (02)9231 8112, Fax: (02)9251 4403
email: tim.entwisle@rbgsyd.nsw.gov.au.

Dr M. Finlayson: wetland ecology and management; mining and agriculture impacts; inventory and assessment, Ramsar convention. Wetlands Ecology, IWMI, PO Box 2075, Colombo, Sri Lanka. Phone: +94-11-2787404 extn 1306 Mobile +94-777562217, email: m.finlayson@cgiar.org

Dr A. García: taxonomy, ecology, biology and biogeography of extant and fossil charophytes. School of Earth and Environmental Sciences, University of Wollongong NSW 2522 Phone: (02) 42215966 Fax: (02) 42215703, e-mail: adriana@uow.edu.au

Dr M.Grace: nutrient cycling and biogeochemical processes.
CRC for Freshwater Ecology & Water Studies Centre, Chemistry Department, Monash University, Clayton, Victoria, 3800. Phone (03)9905 4078,
Fax (03)99054196, email:michael.r.grace@sci.monash.edu.au

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